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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/923,035

Applicant(s)

NAFEH ET AL.

Examiner

Elda Milef

Art Unit

3694

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28, 96, 104, 105, 113-115 and 124 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28, 96, 104, 105, 113-115 and 124 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Page No(s)/Mail Date _____

DETAILED ACTION

Status of the Claims

1. This office action is in response to the amendments submitted by the applicants on 11/30/2009.

- Claims 29-95, 97-103, 106-112, 116-123, 125-126 are cancelled.
- Claims 1, 28 are amended.
- Claims 1-28, 96, 104-105, 113-115, 124 are pending in the application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/30/2009 has been entered.

Specification

3. The disclosure is objected to because of the following informalities:

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. The hyperlink is <http://www.biz.uiowa.edu/iem/index.html> appearing on page 6 [0017] of the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1-10, 14-19, 24-26, 28, 104,105,113-115, 124 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd (US Patent No. 5,970,479) in view of Slyke et al (hereinafter Slyke US 2002/0042770 A1) in further view of Muralidhar (U.S. Patent No. 7,206,755).

Re Claim 1: Shepherd disclose:

establishing a computer-network based futures trading system electronically accessible by traders, said trading system including a plurality of trading accounts, each trader on the trading system being associated with at least one of the trading accounts;

settling contracts against trading accounts of traders (trading of risk management contracts) col. 7, lines 1-49; figure 2; (Contract settlement) col. 11 lines 50-52; Figures 6, 41-48.

Shepherd does not specifically disclose establishing, on said trading system, a plurality of separate contracts within contract bundles, wherein each contract bundle comprises at least two separate contracts, and selling, over said trading system, at least one of the plurality of separate contracts within the contract bundle. Slyke however, discloses liquid insurance (i.e. risk management) contracts, including the use of bundling multiple existing contracts (paragraph 0268-0269). It would have been obvious to one having ordinary skill in the art to include the teachings of Slyke to the disclosure of Shepherd in order to reduce the risk associated with dealing with future events. For example, Slyke notes a specific example of bundling an LIC with a currency exchange contract when dealing with investments in foreign currencies. This bundle is necessary to both hedge against the risk of future event of the contract itself, as well as any fluctuations in currency that result over the life of the contract.

Shepherd disclose risk management contracts specifying an entitlement or (pay-off) at the future time of maturity for each outcome. —see Abstract and col. 4 lines 13-29. Shepherd and Slyke do not explicitly disclose each contract bundle paying off an aggregate fixed monetary sum at maturity, the aggregate fixed monetary sum known when the contract bundles are established. Muralidhar disclose derivatives (contract bundles) and paying off an aggregate fixed sum at maturity, the fixed sum known when contract bundles are established (providing a pre-specified payoff of a fixed sum at

maturity, col. 2 line 64 to col. 3 line 14; col. 4 lines 31-34; col.6 lines 45-53). It would have been obvious to one having ordinary skill in the art to include in the method and apparatus of trading risk management contracts of Shepherd and the method and system of trading liquid insurance contracts of Slyke the ability to trade contracts and derivatives of those contracts, and to provide a pre-specified payoff as taught by Muralidhar since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. Furthermore, it is notoriously old and well known in the art of finance that the price of a futures contract is determined when the contract is established.

Although Shepherd discloses accepting futures contracts for resale in col. 5 lines 25-40, Shepherd does not specifically disclose accepting for resale, the at least one of the plurality of separate contracts within the contract bundles. Slyke however, teaches LICs with detachable options-see pars. 166-171 and settling the at least one of the plurality of separate contracts against the trading account of the trader of said separate contract-see pars. 200-206, 166-171, 235. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shepherd to specifically include liquid insurance contracts (LICs) with detachable options/securities as taught by Slyke in order to allow underwriters who would prefer to obtain more cash early on to detach and sell the detachable premium security.

Shepherd does not explicitly disclose assessing a transaction fee for at least one of the said steps of selling, accepting for resale, or settling of the at least one of the plurality of separate contracts. Slyke however disclose transaction fees in para 207, and 304. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shepherd to specifically include transaction fees as taught by Slyke in order to generate revenue and pay expenses incurred by the exchange. Furthermore, Muralidhar discloses transaction fees in col. 4 line 19.

Re Claims 2-6: Shepherd does not explicitly disclose establishing a computer-network based futures trading system electronically accessible by prospective traders includes establishing a computer-network based futures trading systems electronically accessible by prospective traders via at least an internet interface; allowing only predetermined computer-network users to view information about said trading system. Slyke however, teaches a method for bidding using the Internet -see para. 133 and a qualifying a buyer /underwriter process-see pars. 126-128. It would have been obvious to having ordinary skill in the art at the time the invention was made to modify Shepherd to specifically include qualifying users of the trading system as taught by Slyke in order to protect the customers and the exchange from fraud and unfair business practices.

Re claim 7: Shepherd discloses contracts paying a fixed sum or a zero sum depending on an outcome of a future event and derivatives.-see col. 4 lines 17-23; col. 5 lines 12-24; col. 9 lines 48-50. Shepherd does not explicitly disclose separate contracts. Slyke however, teaches separate contracts included in a bundle. -see pars. 268-273. It would have been obvious to one having ordinary skill in the art at the time

the invention was made to include the teachings of Slyke to the disclosure of Shepherd in order to reduce the risk associated with dealing with future events.

Furthermore, it is old and well known in the art of Finance that derivatives are bundles of futures contracts. -see Conclusion below and prior art cited under Chung.

Re Claim 8, 9: Shepherd/Slyke/Muralidhar disclose the claimed method supra, Shepherd further discloses the step of receiving data from a prospective trader identifying a predetermined phenomenon for which a futures contract is desired, the phenomenon having at least two future possible outcomes at a time of maturity (Column 4, lines 17- 23). Shepherd discloses wherein the step of selling futures contract bundles, includes selling a futures contract bundle comprising at least two futures contracts, each of said at least two futures contracts corresponding to one of said at least two future possible outcomes of said future event. (Column 4, lines 25- 29). Shepherd does not specifically disclose separate contracts. Slyke however, teaches separate contracts included in a bundle. -see pars. 268-273. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teachings of Slyke to the disclosure of Shepherd in order to reduce the risk associated with dealing with future events.

Re Claim 10: Shepherd/Slyke/ Muralidhar disclose the claimed method supra including separate contracts within a bundle as in claim 1 above, but do not explicitly disclose determining whether a future event for which at least one contract bundle is desired is suitable for the issuance of the at least one contracts bundle thereon. However, the fact that the system issues a futures contract related to a predetermined

phenomenon implies that the contract is suitable (Shepherd, Column 4, lines 30-33).

The entry of information by the ordering stakeholder such as the range of future outcomes, time of maturity and entitlement due at maturity (Shepherd, Column 4, lines 47-55) shows that the system requires information specific to a futures contract and will not execute the transaction unless said information is provided.

Re Claim 14: Shepherd/Slyke/Muralidhar disclose the claimed method supra and Shepherd further discloses the steps wherein selling and settling are accomplished in a credit-risk free manner (Column 5, lines 56-60).

Re Claim 15: Shepherd disclose selling is on margin and the step of selling and the step of settling said are accomplished in a credit risk manner. Col. 12 line 67 to col. 13 line 5.

Re Claims 16, 17: Shepherd does disclose that counterparty stakeholders input registering data (Column 4, lines 25-29), which would include the identity of the counterparty. Muralidhar discloses the trader providing an account number and a password to the system and the steps of selling, resale, settling and assessing over trading system is with respect to traders having indicia. Cols. 7-8. It would have been obvious to one having ordinary skill in the art to include in the method and apparatus of trading risk management contracts of Shepherd and the method and system of trading of liquid insurance contracts of Slyke the ability to accept identification indicia as taught by Muralidhar since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it

did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Re Claim 18, 19: Shepherd discloses the claimed method supra but does not explicitly disclose wherein only a predetermined group of traders may access trading system wherein the group is selected from predefined or pre-qualified traders. Slyke however, teaches a buyer/underwriter qualification process-see pars. 126-128. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shepherd to specifically include the prequalification of traders as taught by Slyke in order to protect the customers and the exchange from fraudulent transactions. Furthermore, this step would have been obvious to anyone skilled in the ordinary art since often times futures contracts are relevant only to a certain sector and therefore the contracts are only extended to these parties. In this way outside parties without an interest in the particular commodity cannot affect the price of the contract.

Re Claim 24: Shepherd/Slyke/Muralidhar discloses the claimed method supra including separate contracts within a bundle as in claim 1 and Shepherd further discloses the step of accepting said futures contracts for settlement thereof includes accepting contract bundles for settlement at an expiration thereof (Column 5, lines 12-24).

Re Claim 25: Shepherd/Slyke/Muralidhar disclose the claimed method supra including separate contracts within a bundle as in claim 1 and Shepherd discloses redemption prior to an expiration thereof. (Column 5, lines 47-55).

Re Claim 26: Shepherd/Slyke/Muralidhar disclose the claimed method supra and

Shepherd further discloses the step of providing a market authority for mediating any dispute related to said trading system (Column 5, lines 56-60).

Re claim 28: Further a system would have been necessary to perform the method of previously rejected claims 1,17-19 in combination and is therefore rejected using the same art and rationale.

Claims 104, 105 have similar limitations found in claims 1 and 28 above, and therefore are rejected by the same art and rationale.

Claims 113, 124 have similar limitations found in claim 1 above, and therefore are rejected by the same art and rationale.

Claims 114, 115 have similar limitations found in claims 1 and 7 in combination above, and therefore are rejected by the same art and rationale.

5. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd in view of Slyke et al. in view of Muralidhar as applied to claim 7 above, and further in view of Lange (US 6,321,212).

Re Claim 11: Shepherd/Slyke/ Muralidhar disclose the claimed method supra but do not explicitly disclose the step of establishing over said trading system, a plurality of futures contract bundles, each contract bundle comprising at least two separate futures contracts, at least one of said plurality of futures contract bundles having a time period from a sale thereof to an expiration thereof which partially overlaps the time period from a sale of another of said plurality of futures contract bundles until an expiration of said another of said plurality of futures contract bundles, said at least one of said plurality of

futures contract bundles corresponding to a first periodic occurrence of said future event and said another of said plurality of futures contract bundles corresponding to a second periodic occurrence of said future event. However it was well known in futures markets at the time of invention that similar contracts involving the same future event but having a different expiratory date could be traded concurrently and overlapping trading periods as evidenced by Lange col. 17 line 13 to col. 18 line 18; col. 91 lines 42-49. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shepherd/Slyke/ Muralidhar to specifically include overlapping time periods of trades as taught by Lange in order to allow traders to make investments during successive trading periods as the returns change in order to hedge options, futures and other derivative trades.

Re Claims 12 and 13: Shepherd/Slyke/ Muralidhar disclose the claimed method supra but do not explicitly disclose the steps: wherein each one of said plurality of futures contract bundles are sold at staggered time periods having a predetermined relationship to the timing of a specific periodic occurrence of said future event associated therewith; and establishing, over said trading system, a contract bundle associated with a specific periodic occurrence of said future event at substantially the same time as an expiration of a futures contract bundle associated with another periodic occurrence of said future event. It was well known in the art at the time of invention that participants in futures markets have traded in interest rate futures to hedge against rising or falling interest rates. Furthermore, Lange disclose staggered time periods of trading col. 12 line 6 to col. 13 line 24 and constructing groups of DBAR contingent

claims based on multiple events col. 46 line 42 to col. 47 line 5. It would have been obvious to anyone skilled in the ordinary art at the time of invention to include staggered time periods of trading and constructing groups of contingent claims based on multiple events as taught by Lange in order to hedge the real-world event that one asset class will outperform another.

6. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd in view of Slyke et al. in view of Muralidhar as applied to claim 1 above, and further in view of Huang (Huang, Robert D. and Hans R Stoll. "Is it time to split the S&P 500 futures contract?" *Financial Analysts Journal* 54.1 (1998): 23-35).

Re Claims 20, 21: Shepherd/Slyke/Muralidhar disclose the claimed method supra including separate contracts within a bundle as in claim 1, but do not explicitly disclose the step of introducing new futures contracts to the trading system as a split of an existing separate contract, an aggregate liquidation value of the new contracts equaling the liquidation value of the existing separate contract which is split and the step of concurrent with said step of introducing new futures contracts to the trading system as a split of an existing separate contract, retiring said existing separate contract. Huang however, teaches splitting futures contracts (mechanics of splitting pg. 27 to pg. 28). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shepherd/Slyke/Muralidhar to specifically include splitting a contract as taught by Huang in order to provide liquidity to the market and give participants are given the opportunity to better their current positions.

7. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd in view of Slyke et al. in view of Muralidhar as applied to claim 1 above, and further in view Burghardt (Burghardt, Galen, George Panos, and Fred Sturm. "Hedging and trading with Eurodollar stacks, packs, and bundles." *Derivatives Quarterly* 1 Jul 2000 pg. 50).

Re Claims 22, 23: Shepherd/Slyke/Muralidhar disclose the claimed method supra including separate contracts within a bundle as in claim 1, but do not explicitly disclose the step of receiving at least two existing separate contracts prior to a maturity thereof and introducing a new futures contract to the trading system as a combination of said existing futures contract, a liquidation value of the new futures contract equaling an aggregate of the liquidation value of said at least two existing separate contract; and the step of soliciting, over said trading system a trader for delivery of said at least one new contract, which completes contract bundle, prior to a maturity thereof. However the process of combining two existing futures contracts into an aggregated singular contract was well known in futures markets as evidenced by Burghardt pg. 52 col. 2 to pg. 53 (Packs and Bundles) and would therefore be obvious to anyone skilled in the ordinary art to include in an electronic market such as the one of Shepherd. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shepherd/Slyke/Muralidhar to explicitly include combining two contracts prior to maturity and soliciting over a trading system as taught by Burghardt in order to permit simultaneous purchase or sale of equally weighted consecutive sequences of contracts.

8. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd in view of Slyke et al. in view of Muralidhar as applied to claim 1 above, and further in view of Friesen et al. (US 6,993,504).

Re Claim 27: Shepherd/Slyke/Muralidhar disclose the claimed method supra but do not explicitly disclose establishing a computer network based contract trading system electronically accessible by non-trading observers. Friesen however, teach allowing non-traders using the interface of the invention to view significant market information. It would have been obvious to one having ordinary skill in the art to include in the trading systems and methods of Shepherd/Slyke/Muralidhar the ability to allow non-traders to interface with the trading system as taught by Friesen since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

9. Claim 96 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd, Slyke, and Muralidhar as applied to claim 28 above, and further in view of Togher (U.S. Patent No. 5,375,055).

Re claim 96: Shepherd/Slyke/ Muralidhar disclose the claimed method supra but do not explicitly disclose anonymous trading. Togher however, disclose anonymous trading-see Abstract. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shepherd, Slyke, and Muralidhar to

specifically include anonymous trading as taught by Togher in order to avoid an unwanted shift in the market due to the buying practices of large institutional investors.

Response to Arguments

10. Applicant's arguments filed 11/30/2009 have been fully considered but they are not persuasive.

In response to the applicant's argument that Shepherd, Slyke and Muralidhar do not disclose contract bundles paying off an aggregate fixed monetary sum at maturity, the aggregate fixed monetary sum known when the contract bundles are established. Muralidhar teaches "alternative forms of options have included those that provide a pre-specified payoff when an event occurs during a defined time period...options have been used for hedging the risk of changes in the value of the underlying asset or occurrence of event or for investment or speculation." col. 3 lines 11-23. Muralidhar disclose "Further, analytic algorithms and code modules can be run against this warehouse data for the purpose of generating financial derivative instruments on the listed options; and indices and probabilities to quantify the odds of the various competitors reaching the different levels of competition can be generated." col. 9 lines 45-50.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Shepherd disclose the trading of risk management contracts, Slyke et al. disclose a method for creating and trading liquid insurance contracts, and Muralidhar teaches trading of options that provide pre-specified payoffs in an effort to hedge risk.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cochran, Thomas N. "The striking price: Time to split? " *Barron's* 13 May 1996. cited for futures contract splitting.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elda Milef whose telephone number is (571)272-8124. The examiner can normally be reached on Monday -Friday 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell can be reached on (571)272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elda Milef/
Examiner, Art Unit 3694
